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(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MARIE, Hervé, Jean, François [FR/FR]; Société Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).

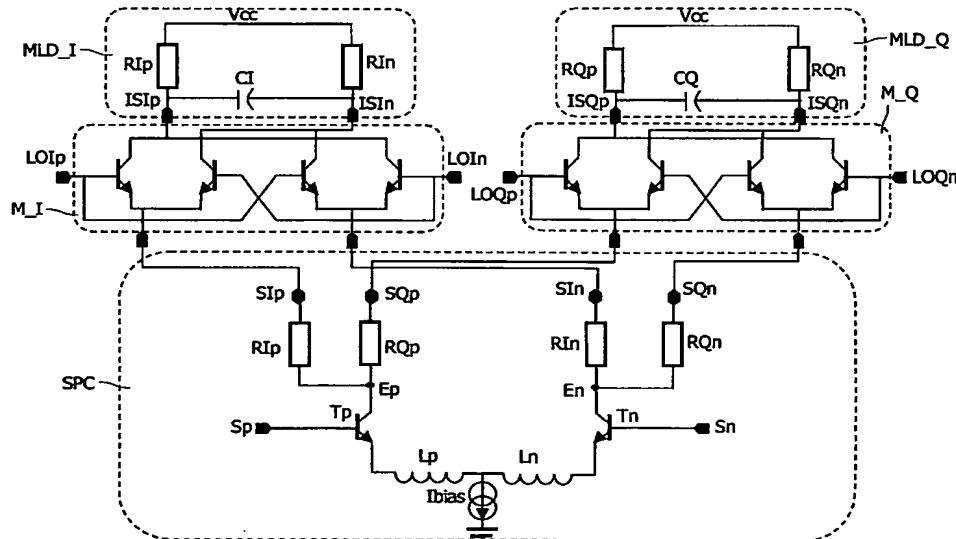
(74) Agent: VAN OUDHEUSDEN-PERSET, Laure; Société Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).

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(54) Title: HIGH PERFORMANCE LOW NOISE AMPLIFIER



(57) Abstract: A signal processing circuit is proposed, which is intended to receive a pair of input signals Sp and Sn in phase opposition on two input terminals and to provide two pairs of output currents SIp and SIn in phase opposition on four output terminals. Each input signal Sp and Sn is amplified in an amplification unit LNAUp and LNAUn and subsequently split in a splitting unit SPLUp and SPLUn. The invention is such that each of the two splitting units SPLUp and SPLUn includes at least two branches, respectively BIp, BQp and BIn, BQn connected between said amplification unit, respectively LNAUp and LNAUn, and one of said output terminals, the four branches BIp, BQp and BIn and BQn each including at least an impedance, respectively RIp, RQp, RIn, RQn, having identical characteristics. Mixer circuits can be easily stacked with this signal processing circuit.

**Declaration under Rule 4.17:**

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ,*

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